

- 36 -

**ABSTRACT**

The invention provides a dietary supplement comprising at least one flavonoid source and an enzyme, that is effective for inhibiting *in vivo* platelet activity and LDL cholesterol oxidation in a mammal at a dosage of about 30 mg/Kg or less. The supplement may contain flavonoid sources found in grape seed extracts, grape skin extracts, bilberry extracts, ginkgo biloba extracts or the flavonoid quercetin. The supplement may also contain fungal proteases, acid stable proteases and bromelain. The invention further provides a method for using the dietary supplement and an article of manufacture containing the supplement.

60 F. 50 " 33 F. 40 F. 60